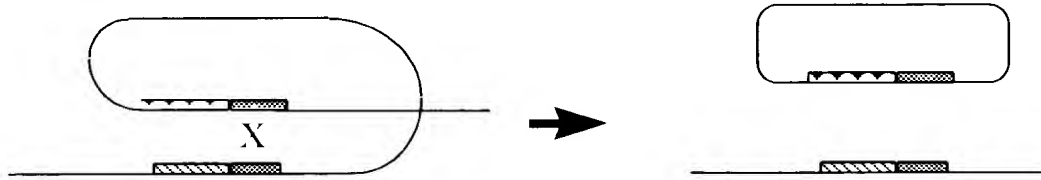


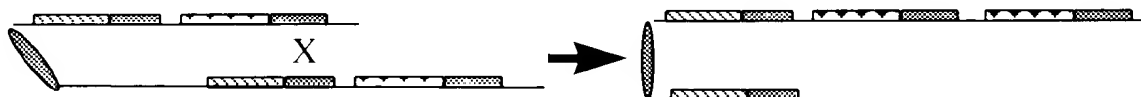
**Figure 1. Three pathways for obtaining "deletion derivatives"**



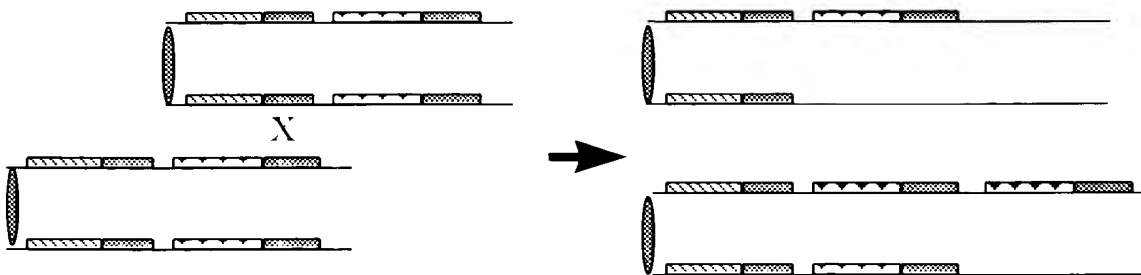
**A. Loop-out**



**B. Unequal sister chromatid crossover**



**C. Unequal interhomologue crossover**



**Figure 2. Gene conversion pathway (nonreciprocal recombination)  
for obtaining “deletion derivatives”**

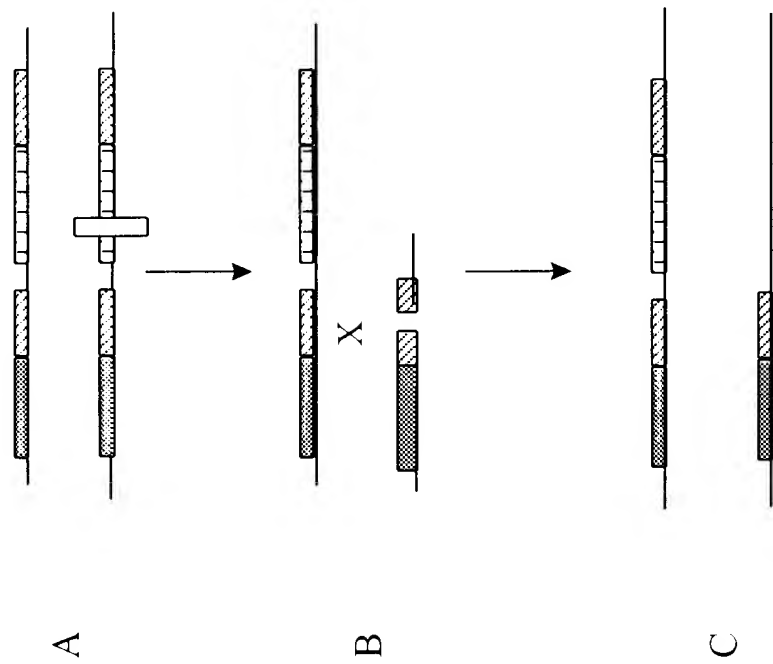
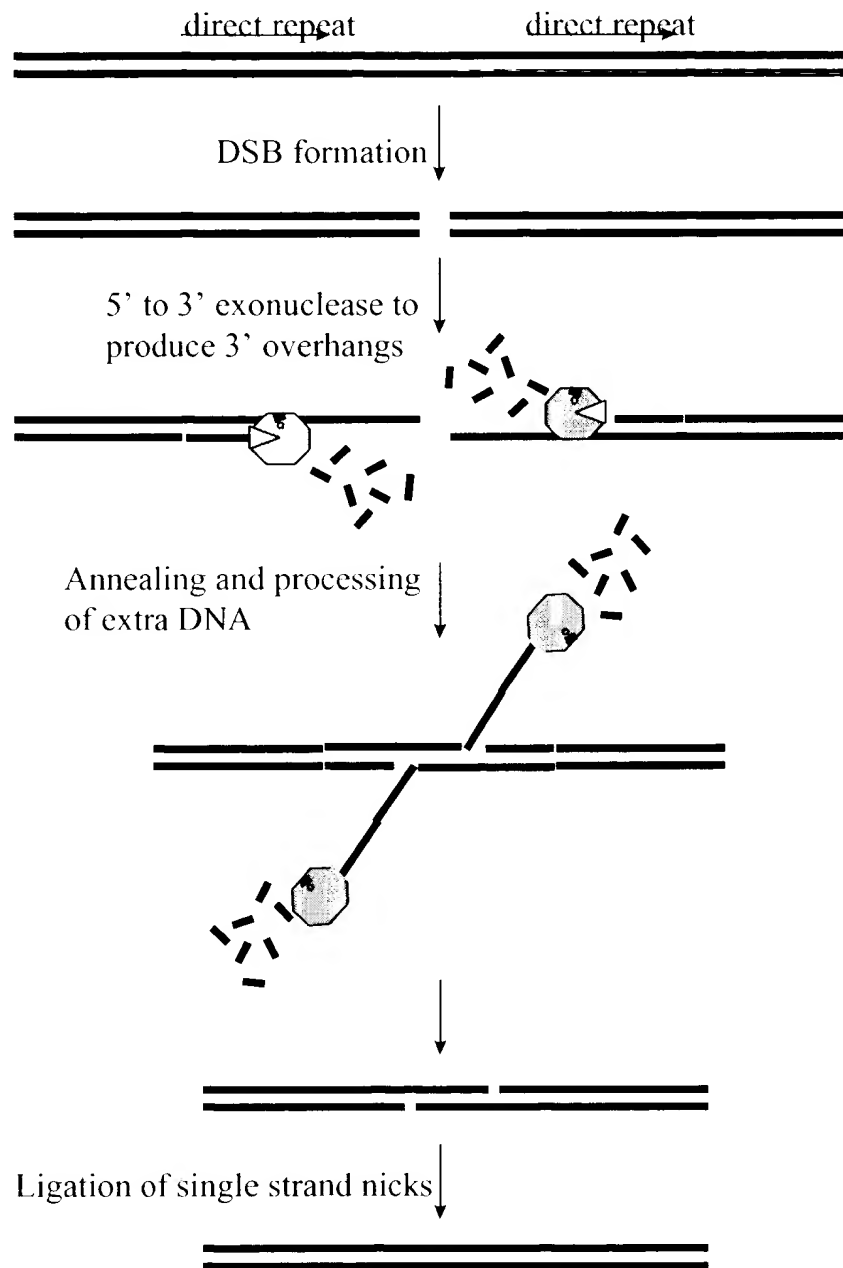


Figure 3. Single strand annealing model



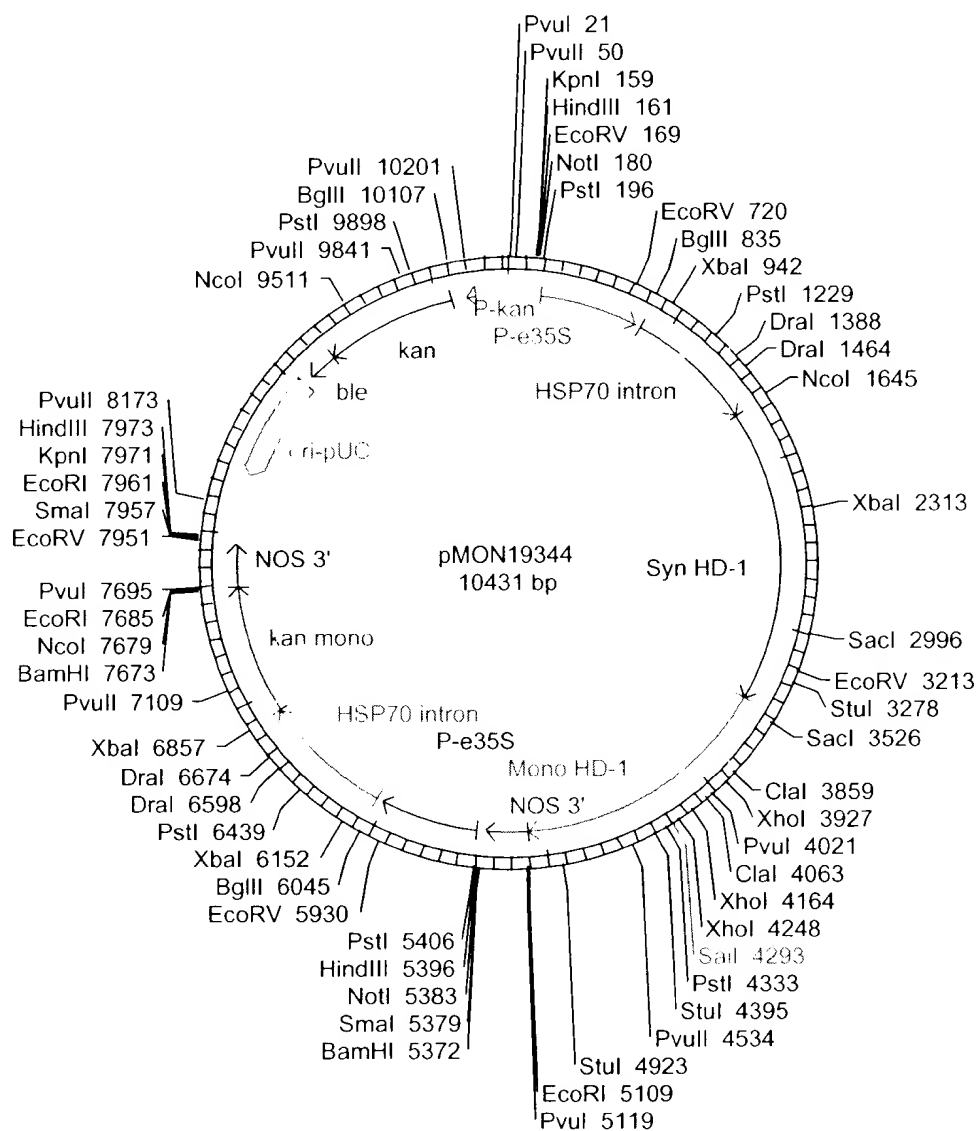
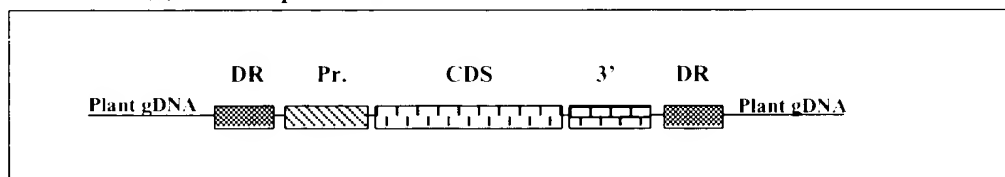


Figure 4.

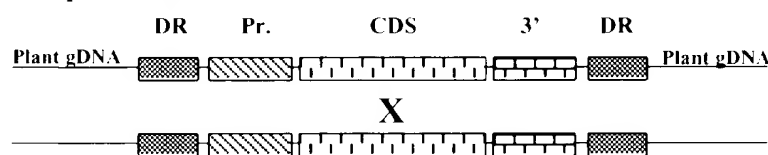
# *Direct Repeat Induced, Non-Reciprocal Recombination-Mediated Transgene Deletion*

## I. Hemizygous $R_1$ Transgenic Plant

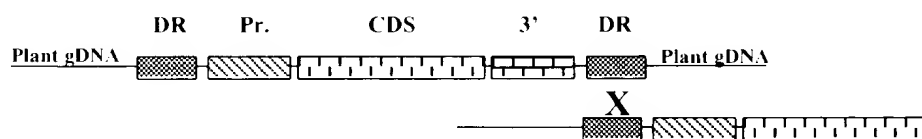


## II. Homozygous $S_1$ Transgenic Plant at Meiosis

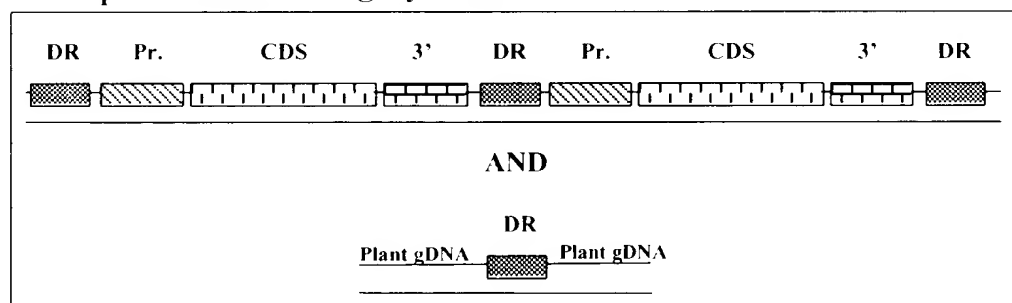
### A. Reciprocal Recombination



### B. Non-Reciprocal Recombination



## III. $F_1$ Recombinant Progeny Plants



In the graphic illustration:

Plant gDNA	=	plant genomic DNA flanking the site of transgene integration
DR	=	Direct Repeat
Pr.	=	"Promoter"
CDS	=	coding sequence
3'	=	transcription terminator

Figure 5.

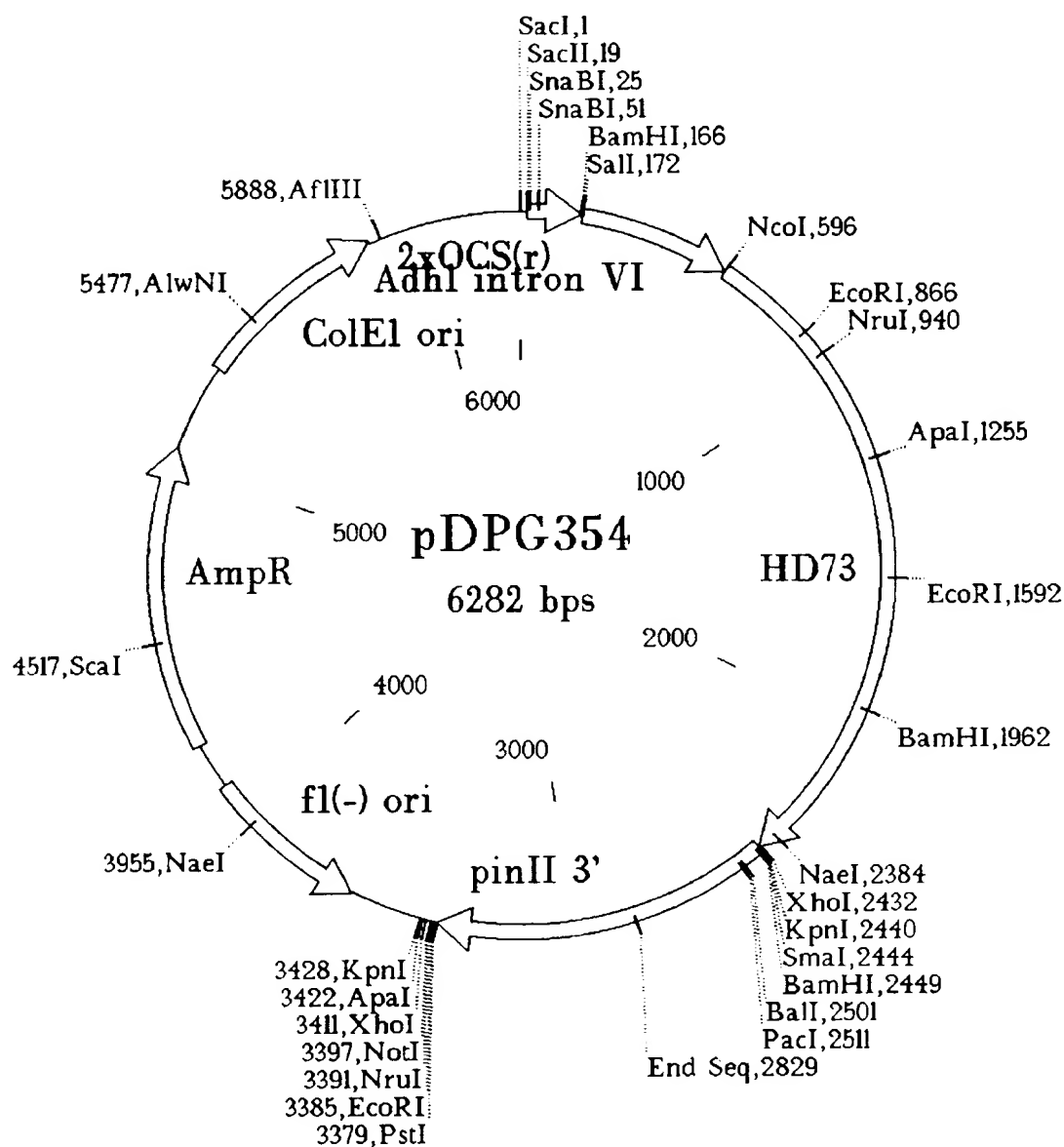


Figure 6.

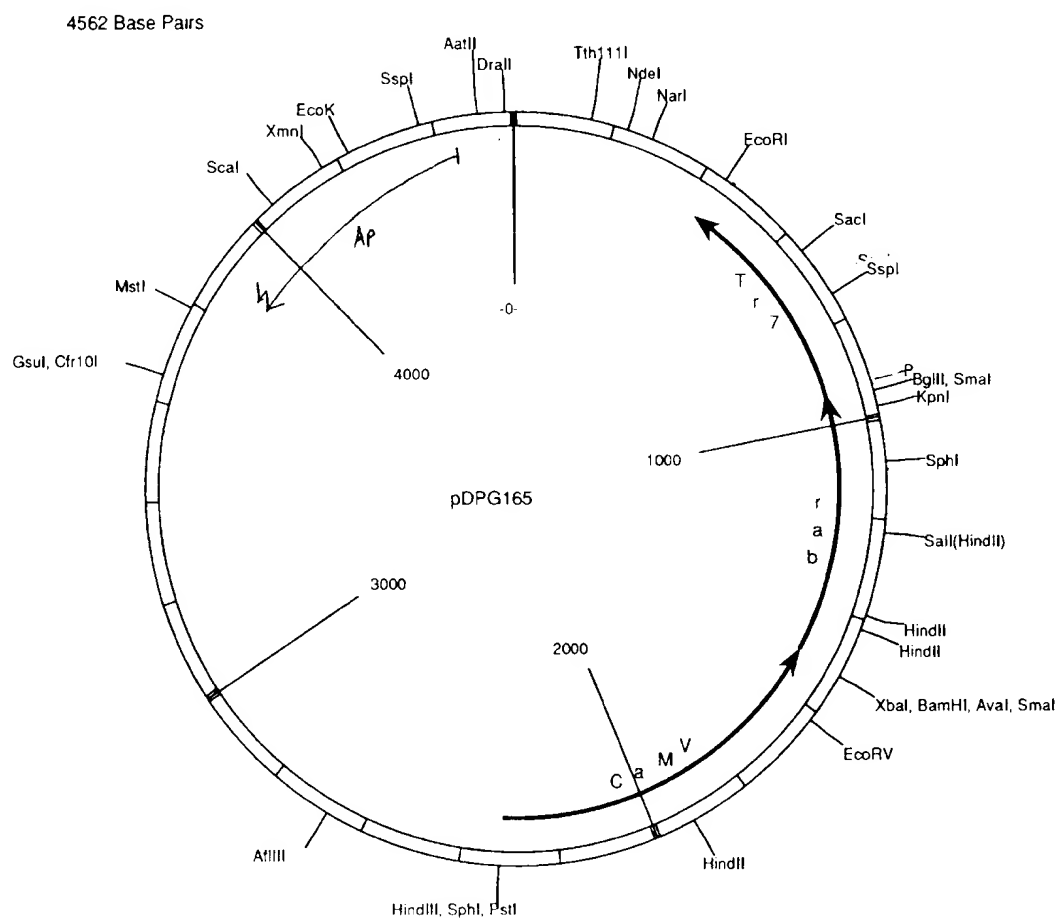


Figure 7.

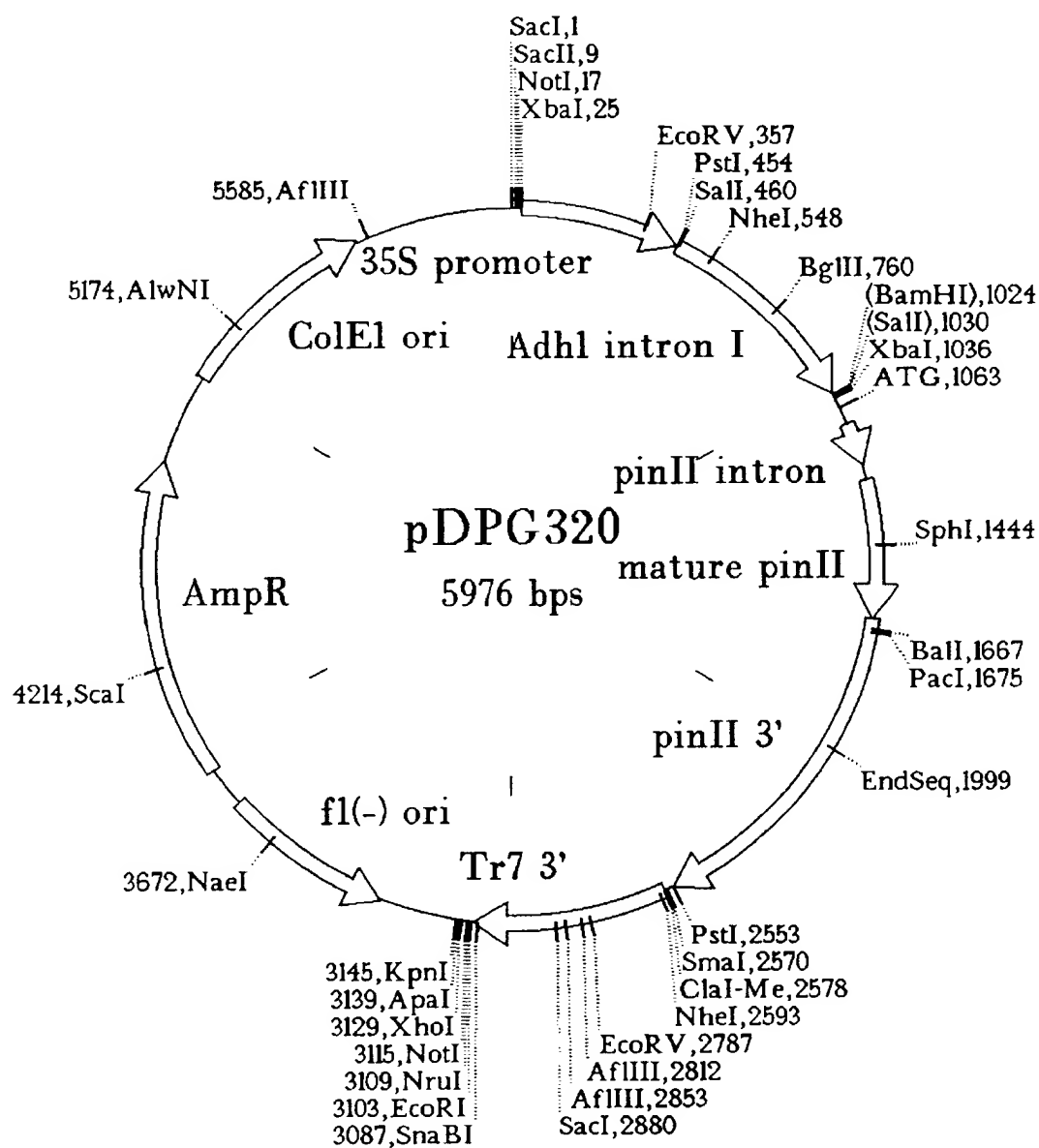


Figure 8.



### **DBT418 Transgene Insertion**

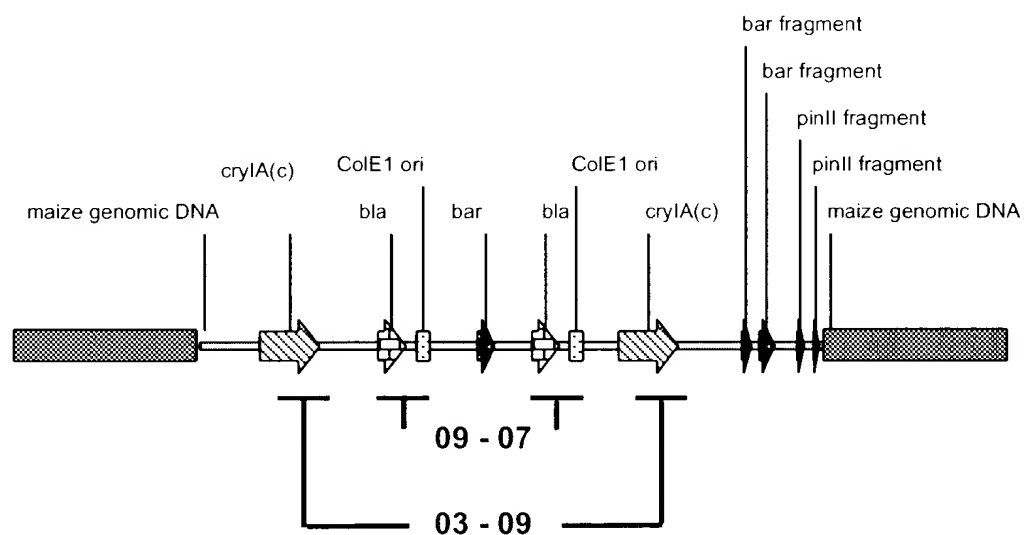
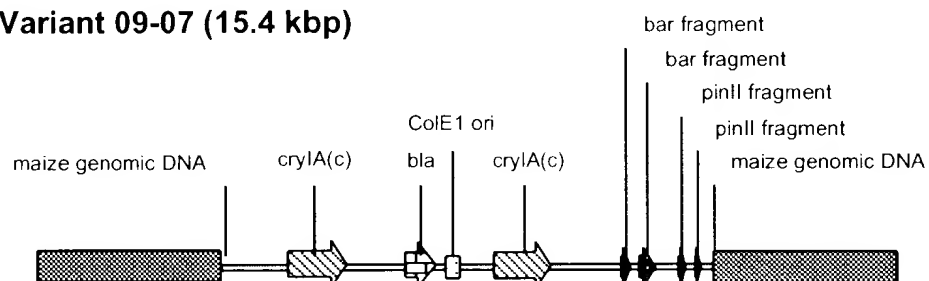


Figure 9.

## **DBT418 Altered Transgene Insertions**

### **Variant 09-07 (15.4 kbp)**



### **Variant 03-09 (9.2 kbp)**

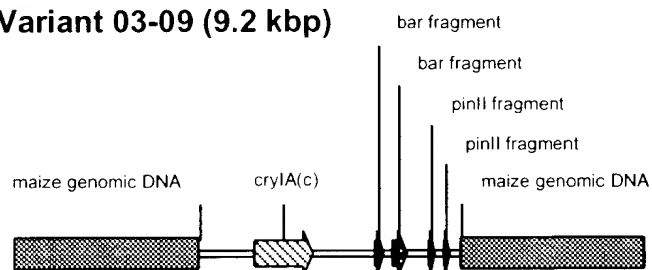
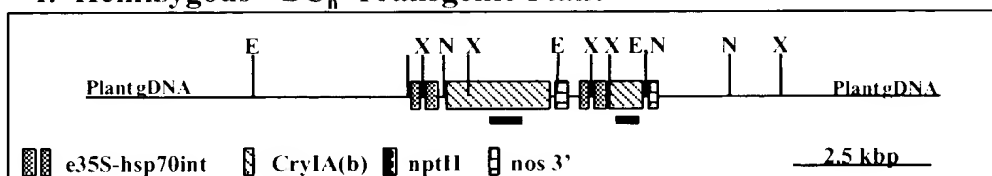


Figure 10.

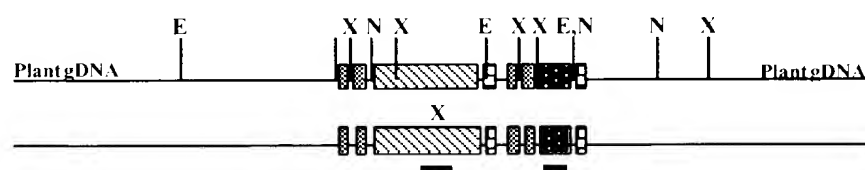
# **Non-Reciprocal Recombination-Mediated Transgene Deletion in MON849**

## **I. Hemizygous BC<sub>n</sub> Transgenic Plant**



## **II. Homozygous S<sub>1</sub> Transgenic Plant at Meiosis**

### **A. Reciprocal Recombination**



### **B. Non-Reciprocal Recombination**

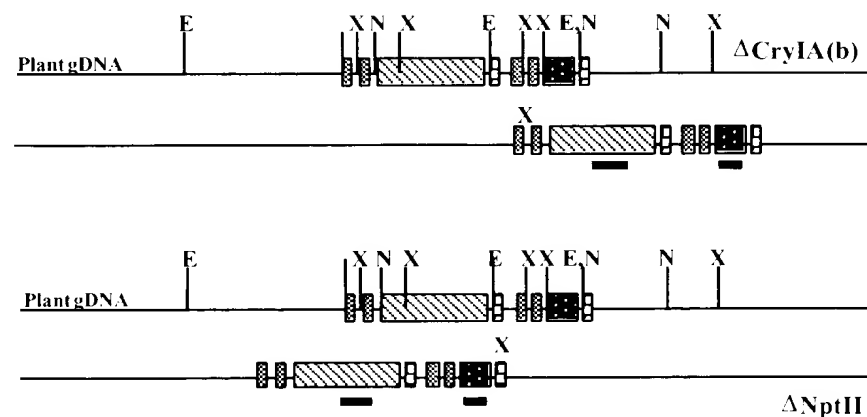
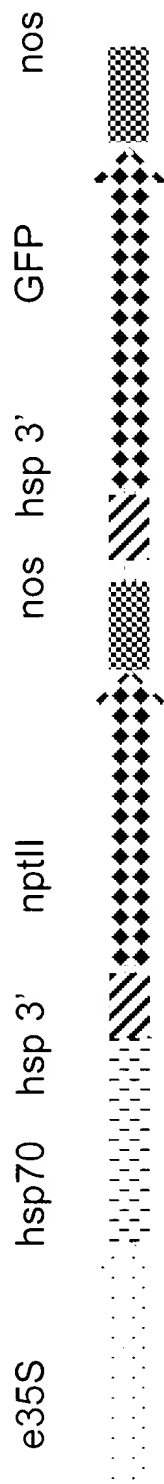
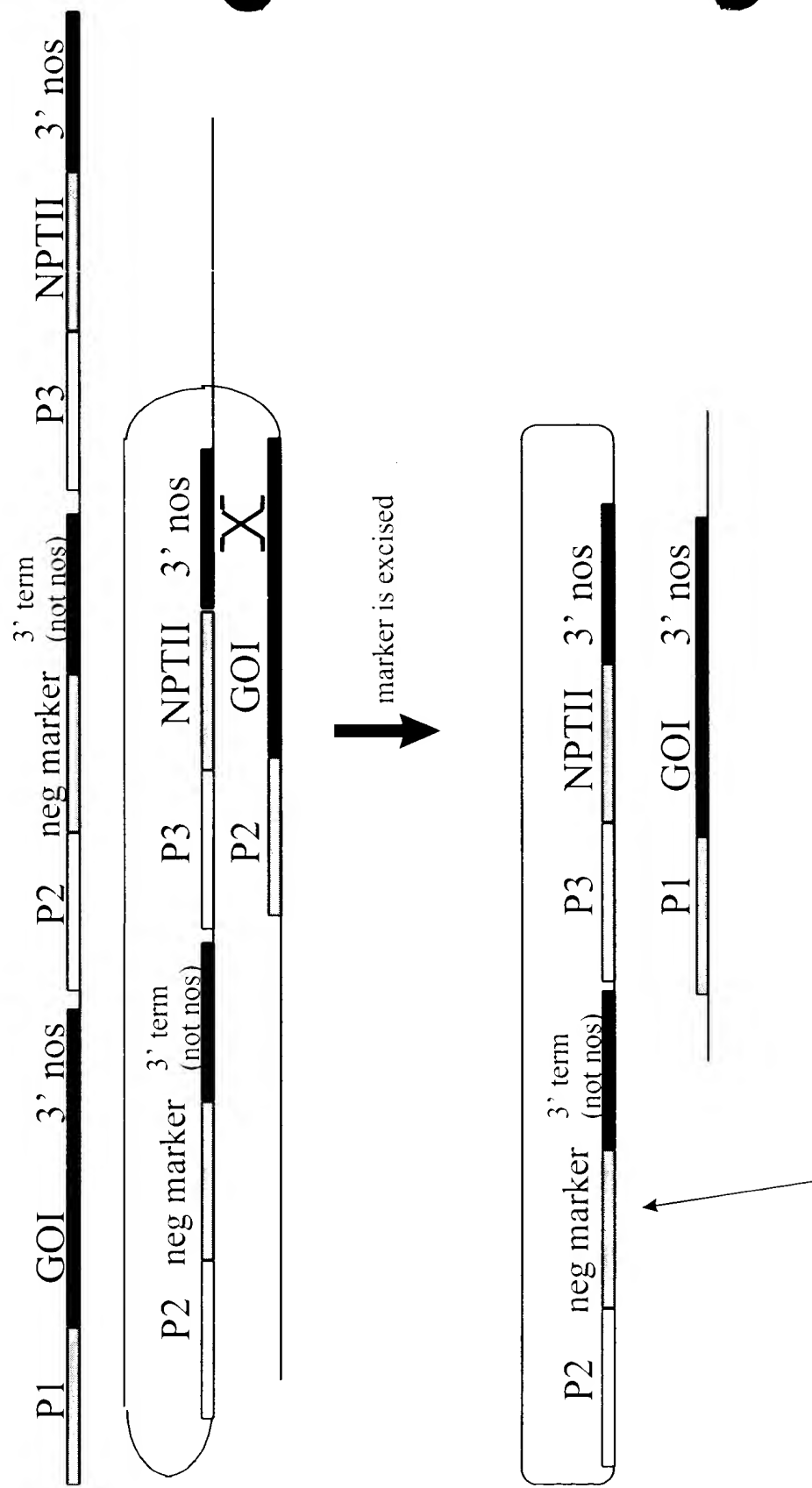


Figure 11.



**pMON36133**

Figure 12.



select for loss of negative selectable marker

Figure 13